# (19) World Intellectual Property Organization International Bureau



# 

#### (43) International Publication Date 16 November 2000 (16.11.2000)

#### **PCT**

# (10) International Publication Number WO 00/67832 A3

(51) International Patent Classification7: A61B 18/14

(21) International Application Number: PCT/US00/13194

(22) International Filing Date: 11 May 2000 (11.05.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/133,610 11 May 1999 (11.05.1999) US

(71) Applicant: ATRIONIX, INC. [US/US]: 1820 Embarcadero Road, Palo Alto, CA 94303 (US).

(72) Inventor: SCHAER, Alan, K.; 5050 Elmgrove Court, San Jose, CA 95130 (US).

(74) Agent: ALTMAN, Daniel, E.; Knobbe, Martens, Olson and Bear, LLP, 16th floor, 620 Newport Center Drive, Newport Beach, CA 92660 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

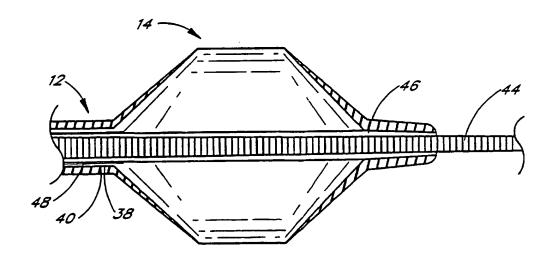
#### Published:

With international search report.

(88) Date of publication of the international search report: 5 July 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BALLOON ANCHOR WIRE



(57) Abstract: The present invention relates to an anchor device comprising an elongated tubular body having an expandable member disposed on its distal end portion. The invention also relates to a system adapted to position and anchor the distal end of an ablation device at a location where a pulmonary vein extends from the atrium.

FA 25878/00

Intern. 1al Application No PCT/US 00/13194

		PC	T/US 00/13194	
A CLASSI IPC 7	FICATION OF SUBJECT MATTER A61B18/14			
According to	o International Patent Classification (IPC) or to both national classification	fication and IPC		
	SEARCHED			
IPC 7	ocumentation searched (classification system followed by classific A61B A61M	ation symbols)		
Documenta	tion searched other than minimum documentation to the extent tha	t such documents are included in	n the fields searched	
	lata base consulted during the international search (name of data betternal, WPI Data, PAJ	pase and, where practical, search	h terms used)	
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the r	elevant passages	Relevant to claim No.	
A	WO 98 49957 A (LESH MICHAEL D; CALIFORNIA (US)) 12 November 1998 (1998-11-12) page 24, line 31 -page 26, line figures	1-3,5,6, 12-19		
A	WO 99 02096 A (ATRIONIX INC ;UN CALIFORNIA (US); UNIV EMORY (US 21 January 1999 (1999-01-21) page 48, line 17 -page 49, line figures	1,16		
A	WO 97 37607 A (CARDIMA INC) 16 October 1997 (1997-10-16) cited in the application abstract; figures		1,16	
		-/		
X Furt	her documents are listed in the continuation of box C.	X Patent tamily member	ers are listed in annex.	
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed		<ul> <li>To later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>To document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>To document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents; such combination being obvious to a person skilled in the art.</li> <li>To document member of the same patent family</li> </ul>		
Date of the actual completion of the international search  3 October 2000		Date of mailing of the international search report 2 3. 01 2001		
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tet. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer  KOUSOURETAS, I		

1

Interr nal Application No
PCT/US 00/13194

0.40-	ALTO DOGUMENTO CONCIDENTO DE SEL CUANT	PC1/03 00/13194		
	tion) DOCUMENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
P,A	WO 99 44519 A (ATRIONIX INC) 10 September 1999 (1999-09-10) abstract; figures	1,16		
İ	abstract; figures			
	·			
		.		
,				
İ				
ŀ				
_				

1

Inconational application No. PCT/US 00/13194

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)						
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:						
1. X Claims Nos.: 42–45 because they relate to subject matter not required to be searched by this Authority, namely:						
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery						
Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:						
3. Claims Nos.:						
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).						
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)						
This International Searching Authority found multiple inventions in this international application, as follows:						
see additional sheet						
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.						
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.						
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:						
<ul> <li>No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:</li> <li>1-19</li> </ul>						
Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.						

#### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-19

An ablation system comprising an anchor device having an expandable member adjustable between a radially collapsed and a radially expanded condition and an ablation device adapted to slideably engage and track over the anchor device.

2. Claims: 20-41

A positioning system comprising an anchor device having an expandable member adjustable between a radially collapsed and a radially expanded condition and a transeptal sheath adapted to be inserted through the atrial septum.

information on patent family members

Intern 1al Application No PCT/US 00/13194

Patent document cited in search report		Publication date	Patent family member(s)		Publication date	
WO 9849957	A	12-11-1998	AU 74790 BR 98093 CN 12590	983 A 998 A 258 A 852 T 271 A	26-10-1999 27-11-1998 27-06-2000 12-07-2000 02-02-2000	
WO 9902096	A	21-01-1999	AU 82959 CN 1269 EP 1009	708 T	11-01-2000 08-02-1999 11-10-2000 21-06-2000 12-09-2000	
WO 9737607	Α	16-10-1997	AU 714 AU 2608	077 A 573 B	26-01-1999 16-05-2000 06-01-2000 29-10-1997 24-03-1999	- <u>-</u>
WO 9944519	A	10-09-1999	AU 2887 EP 1059	199 A 886 A	20-09-1999 20-12-2000	